

REMARKS

This Amendment is responsive to the Office Action mailed September 21, 2004.

Objection to Drawings

The drawings are objected to as being informal. Applicants intend to produce formal drawings when the application is indicated as being allowed. Applicants note that the Office Action does not require formal drawings at this time.

Objections to Declaration

The Declaration is objected to because it contains interlineations for the date of execution by inventors Sasikumar Cherubal and Alfred V. Gomes that were not initialed. A replacement Declaration for these two inventors is provided herewith.

Objections Relating to Priority Claims

The Office Action notes that the present application claims priority of the following applications, as indicated on the Filing Receipt:

- (#1) Serial No. 09/575,488, filed May 19, 2000;
- (#2) Serial No. 60/197,749, filed April 19, 2000;
- (#3) Serial No. 60/203,602, filed May 12, 2000.

The Office Action makes the following observations regarding these applications:

- (1) Application (#2) has a different title from the present application;
- (2) Application (#2) has a different inventive entity than the present application;
- (3) Application (#2) is expired;

- (4) Application (#3) has a different title from the present application;
- (5) Application (#3) has a different inventive entity than the present application;
- (6) Application (#3) is expired;
- (7) Application (#1) claimed priority of another application, namely, Serial No. 60,134,800, and Application (#1) did not claim priority from either Application (#2) or Application (#3).

The Office Action requests that an explanation or correction be provided where appropriate. Responsive to this requirement, Applicants submit the following:

- (8) Regarding points (1) and (4) above, the title of the present application does not have the same title as either of the provisional Applications (#2) and (#3), nor does it have the same title as the parent application (#1). For one thing, the titles of all the priority applications are different, and the present application can only have one title. For another, as far as Applicants are aware, there is no legal requirement to have the title of a patent application match the titles of all or any of the applications on which a priority claim is based.
- (9) Regarding points (2) and (5) above, the inventive entity named in the present application includes all of the inventors of the inventive entities named in all of the applications on which priority is being claimed. As discussed below in connection with the rejections under 35 USC §102, priority is properly claimed so long as there is at least one common inventor, as is the case here.
- (10) Regarding points (3) and (6) above, the provisional applications are now expired, but they were not expired on the date that the present application was filed. The time requirement of 35 USC §119(e)(1) was in fact met with respect to both Application (#2) and Application (#3) as can be verified by inspection of the Filing Receipt.

(11) Regarding point (7) above, it is correctly noted that the present application claims priority of 3 different and separate applications. So far as Applicants are aware, a patent application can claim priority of any number of pending patent applications, so long as the requirements of 35 USC §119 or 120 are met for each application on which a priority claim is made.

The Office Action did not cite any law regarding any of the above concerns. Therefore, if there are any legal requirements relating to any of the above points which Applicants have failed to consider, the Examiner is respectfully requested to make appropriate citations to identify such requirements, and to provide Applicants a fair opportunity to formulate an appropriate response by making any second Office Action identifying any such law non-final.

Objection to the Specification--Statement of Related Applications

The priority claims made in the present application are objected to for the same reasons discussed and addressed above; accordingly, any requirement to amend one or more of the priority claims is respectfully traversed on the ground that the Office Action fails to identify a legal requirement that is not being met.

The Office Action also states that the current status of Application (#3), above, has not been provided. An appropriate amendment is made to the specification.

Objection to the Specification-Appendix A

The specification is objected to as including, as an appendix, subject matter that is not a computer program listing, and that an appendix may only be directed to a computer program listing according to 37 CFR 1.96. Applicants respectfully traverse the objection.

37 CFR §1.96 pertains only to submissions of computer program listings--37 CFR §1.96(c) merely indicates that such listings may be submitted in an appendix. 37 CFR §1.96 does not set forth any rule that nothing other than computer program listings may be submitted as an appendix.

Applicants could not find an MPEP provision specifying in general what may or may not be submitted as an appendix. However, it can be noted that MPEP 1121 clearly contemplates appendices for subject matter other than computer program listings. Applicants respectfully submit that, unless there is a rule that prevents submission of the appendix contemplated in the present application, it must be accepted. On the other hand, if there is such a rule, the Examiner is respectfully requested to identify it, giving Applicants a full opportunity to formulate an appropriate response.

Objection to Specification--Non-Patent Publication

The specification is objected to because the incorporation by reference of the papers (A) “Test Generation for Accurate Prediction of Analog Specifications” and (B) “Low-Cost Signature Testing of RF Circuits” is improper, because essential material may not be incorporated by reference to non-patent publications.

Regarding the paper (A), the specification is amended to incorporate by reference the same text found in the provisional application Serial No. 60/197,749. Since the text remains the same, no new matter has been added, and since it is found in a U.S. patent application, it is not a “non-patent publication.”

Applicants would also like to clarify that, while the paper (A) is described as providing “mathematical explanation, background and support for methods according to the invention that are described herein,” there was no intention to imply that this material is essential to meet the requirements of 35 USC §112. Rather, the paper (A) is an academic paper pertaining to the subject matter claimed in the present application that is suitable, and may be found desirable, for wide-ranging academic purposes to theorists in the field of the invention, and it was voluntarily included as an aid for that purpose due to its ready availability.

There are no statements of any kind describing the importance of the paper (B), so there is no apparent basis for the stated assumption that this material is essential.

Applicants respectfully submit that neither papers (A) or (B) contain essential material that is not included explicitly in the text of the present specification, even though the material may be helpful to some people for some purposes. The specification was drafted to include all of the material that is believed to be essential to describe the invention so that it can be understood by persons of ordinary skill, and so that the high level of academic skill possessed by the present inventors is not required.

Objection to the Specification-Brief Description of the Drawings

The description of Figure 6 is objected to because it describes Figure 6 as a flow chart when the Figure shows an apparatus. The Examiner's careful attention to detail in spotting this error is appreciated. The description has been amended to describe Figure 6 as a block diagram illustrating a method as described in detail on Page 10, lines 3 - 14. The block diagram illustrates the method by showing apparatus for performing the method as described.

Objection to the Specification--Page 6, line 8

The Office Action notes that the first full paragraph on Page 6, at line 8, has a missing parenthesis. The paragraph has been amended to correct this error and, again, the Examiner's careful attention to detail in spotting the error is appreciated.

Note Concerning IDS

The Office Action notes a discrepancy between the Applicants' citation of Balivada et al. in the IDS form 1449 and the Balivada et al. reference that was actually submitted. The Form 1449 citation is apparently incorrect. The correct citation is:

Ashok Balivada, Jin Chen, and Jacob A. Abraham, "Analog Testing With Time Response Parameters," IEEE Design & Test of Computers, Pages 18 - 25.

If this is not the citation considered by the Examiner, the Examiner is respectfully requested to make that known to Applicants; otherwise, Applicants will assume that the correct reference was considered.

Objection to Claim 9

Claim 9 is objected to because each element of the claim is not separated by a line indentation. Claim 9 has been amended, although, if the form of the Amendment is not satisfactory, Applicants request that the Examiner advise the Applicants how to properly indicate added line indentations using the markings required under MPEP 714(II)(C.)(B).

SECTION 112 REJECTIONS

As a preliminary statement to the following specific responses, Applicants appreciate that the Examiner is seeking to improve the clarity of the claims, and the Examiner is thanked for his concern and his attention to detail. However, in view of the law regarding prosecution history estoppel, Applicants must also point out where they believe that, although further clarification might be desirable, it is not necessary to meet the requirements of the law.

The following responses are intended to make it clear where the Applicants take issue that changes to the claims are necessary to meet the requirements of 35 USC §112. On the other hand, many changes have been made to the claims along the lines indicated by the Examiner on a voluntary basis.

Section 112 Rejections-Preamble to Claim 1

Claim 1 is rejected under 35 USC §112, second paragraph, as not being definite. Particularly, the preamble to claim 1 recites "A method for low cost signature testing," and the body of the claim does not refer to low cost signature testing. Applicants respectfully traverse the rejection.

Applicants are unaware of any requirement that the body of a claim refer to its preamble. In some cases, it can be the other way around. In those cases, the preamble may impose a limitation on the claim, but in the usual case the preamble merely states a purpose or use for what is claimed. See MPEP 2111.02. The preamble to claim 1 does precisely that--it merely recites a purpose or use for the structure that is claimed in the body of the claim. The structure could be used for some other purpose because, in such case, the preamble is not considered a limitation and is of "no significance to claim construction." Since it is of no consequence to claim construction, its use cannot render an otherwise definite claim indefinite.

Section 112 Rejections--"Said Performance Parameters"

Claim 1 also stands rejected under 35 USC §112, second paragraph, as being indefinite for lack of an antecedent basis for "said performance parameters" in line 4. Applicants respectfully traverse the rejection. As the Office Action notes, claim 1 provides as an antecedent the entire phrase "a selected set of performance parameters." Therefore, there are "performance parameters" as well as "a selected set of [the] performance parameters." Literally, the phrase introduces both (A) a selected set of performance parameters, and (B) the performance parameters themselves. The claim language properly and definitely refers to the latter and not the former.

Section 112 Rejections--"Measuring Said Performance Parameters"

Claim 1 also stands rejected under 35 USC §112, second paragraph, as being indefinite for failing to describe "what way" the claimed measuring is performed. Applicants respectfully traverse the rejection.

MPEP 2173.04 explains that "[b]readth . . . is not to be equated with indefiniteness," citing *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). Quoting: "If the scope of the . . . claims is clear, and if applicants have not otherwise indicated that they intend the invention to be

of a scope different from that defined in the claims, then the claims comply with 35 USC §112, second paragraph.”

There are many ways that the claimed measuring could be performed, and the lack of a specific claim requirement requiring a particular way reflects a decision not to narrow the claim in this manner and therefore to preserve a desired degree of breadth. It is respectfully submitted that that is the Applicants prerogative unless the claim is so broad that it does not meet the requirements of patentability under 35 USC §102-103. The claim is not indefinite because the term “measuring . . . parameters” has a clear and definite meaning as can be verified with a dictionary, i.e., to ascertain a value of the parameters.

Section 112 Rejections--“Said Test Stimulus”

Claims 1, 5, 7, 12, 13, and 15 stand rejected under 35 USC §112, second paragraph, as being indefinite for lack of an antecedent basis for “said test stimulus” in line 14. Applicants respectfully traverse the rejections. As the Office Action notes, a “selected test stimulus” is introduced (at line 8), and since there is no other test stimulus introduced in the claim, there is no possibility for confusion or ambiguity that the “test stimulus” being referred to is the “selected test stimulus” introduced in the claim. MPEP 2173.05(e) makes it clear that there is not a blanket requirement for antecedent basis, stating: “[a] claim is indefinite when it contains words or phrases whose meaning is unclear. The lack of clarity could arise where a claim refers to “said lever” . . . where the claim contains no earlier recitation or limitation of a lever *and where it would be unclear as to what element the limitation is making reference.*” (emphasis added). In this case, it is not unclear that the “test stimulus” is making reference to the “selected test stimulus” introduced earlier in the claim.

This result also makes sense in that “selected” is an adjective describing the nature of the test stimulus, not a name (i.e., not a noun). In other words, the “test stimulus” is not named “selected test stimulus;” rather, the claim is reciting that the thing that is being named “test stimulus” has the nature or character of being selected.

Section 112 Rejections--“Said Manufactured Circuit”

Claim 5 stands rejected under 35 USC §112, second paragraph, as being indefinite for lack of antecedent basis for “said manufactured circuit” in line 2. Applicants respectfully traverse the rejection. As the Office Action notes, a “manufactured electronic circuit” is introduced (in claim 4 from which claim 5 depends), and since there is no other manufactured circuit introduced in either claim, there is no possibility for confusion or ambiguity that the “manufactured circuit” being referred to in claim 5 is the “manufactured electronic circuit” introduced in claim 4. MPEP 2173.05(e) makes it clear that there is not a blanket requirement for antecedent basis, stating: “[a] claim is indefinite when it contains words or phrases whose meaning is unclear. The lack of clarity could arise where a claim refers to “said lever” . . . where the claim contains no earlier recitation or limitation of a lever *and where it would be unclear as to what element the limitation is making reference.*” (emphasis added).

This result also makes sense in that, along with “manufactured” (which also could have been omitted in the same way for the same reasons), “electronic” is an adjective describing the nature of the circuit, not a name (i.e., not a noun). In other words, the “circuit” is not named “manufactured electronic circuit,” it is just a circuit. Rather, the claim is reciting that the thing that is being named “circuit” has the nature or character of being electronic (and being manufactured).

Section 112 Rejections--“Said Model”

Claim 5 stands rejected under 35 USC §112, second paragraph, as being indefinite for lack of antecedent basis for “said model,” in line 5. Applicants agree with the Examiner and appropriate correction has been made.

Section 112 Rejections--“Said Training Circuits”

Claim 6 stands rejected under 35 USC §112, second paragraph, as being indefinite for lack of antecedent basis for “said training circuits,” in line 2. Applicants respectfully traverse the

rejection. The phrase “[o]ne or more manufactured training circuits” is introduced in claim 4 from which claim 6 depends. Therefore, there are “training circuits” as well as “one or more manufactured training circuits.” Literally, the phrase introduces both (A) one or more manufactured training circuits, and (B) the training circuits themselves. The claim language properly and definitely refers to the latter and not the former.

Section 112 Rejections--“Said Threshold”

Claims 6 and 14 stand rejected under 35 USC §112, second paragraph, as being indefinite for lack of antecedent basis for “said threshold,” (Claim 6, line 5, Claim 14, line 6). Applicants respectfully traverse the rejection. As the Office Action notes, the phrase “predetermined threshold” is introduced (e.g., Claim 6, lines 4 - 5). Since the only threshold referred to in the claim is “a predetermined threshold,” there is no possibility for confusion or ambiguity that “said threshold” refers to the “predetermined threshold;” therefore the claim is clear and definite. This result also makes sense in that “predetermined” is an adjective describing the nature of the threshold, not a name (i.e., not a noun). In other words, the “threshold” is not named “predetermined threshold;” rather, the claim is reciting that the thing that is being named “threshold” has the nature or character of being predetermined.

Section 112 Rejections--“Said Output”

Claim 7 stands rejected under 35 USC §112, second paragraph, as being indefinite for lack of antecedent basis for “said output,” in line 5. Applicants respectfully traverse the rejection. As the Office Action notes, the phrase “a signature output” is introduced (at line 3). Since the only output introduced in the claim is “a signature output,” there is no possibility for confusion or ambiguity that “said output” refers to the “signature output” introduced in the claim; therefore the claim is clear and definite.

Section 112 Rejections--“RF”

Claims 8 and 16 stand rejected under 35 USC §112, second paragraph, as being indefinite for use of the abbreviation “RF.” Applicants respectfully traverse the rejection because “RF” is a standard abbreviation for “radio frequency,” used in the specification, and is a term of art having a well known meaning in the art.

Section 112 Rejections--“Computerized Model”

Claims 9 and 12 stand rejected under 35 USC §112, second paragraph, as being indefinite for use of the word “computerized” to describe “model.” Applicants respectfully traverse the rejections because persons of ordinary skill in the art of signature testing would certainly understand that the term “computerized model” refers to a model that is implemented on a computer.

Section 112 Rejections--“Computer Program Adapted to Command”

Claim 9 stands rejected under 35 USC §112, second paragraph, as being indefinite for reciting a “computer program adapted to command . . .” in line 8. Applicants have amended the claim to make it explicit that the computer program is in a machine readable form.

Section 112 Rejections--“Corresponding Measured Values”

Claim 9 stands rejected under 35 USC §112, second paragraph, as being indefinite for use of the term “corresponding measured values,” in line 10. The Office Action poses the question, “measured values by what?”, implying that the claim fails to pass muster because it does not recite a mechanism for obtaining the measured values.

MPEP 2173.04 explains that “[b]readth . . . is not to be equated with indefiniteness,” citing *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). Quoting: “If the scope of the . . . claims is clear, and if applicants have not otherwise indicated that they intend the invention to be

of a scope different from that defined in the claims, then the claims comply with 35 USC §112, second paragraph.”

There are many structures that could be used to measure values, and therefore to obtain measured values, and the lack of a specific claim requirement requiring a particular measuring structure reflects a decision not to narrow the claim in this manner and therefore to preserve a desired degree of breadth. It is respectfully submitted that this is the Applicants prerogative unless the claim is so broad that it does not meet the requirements of patentability under 35 USC §102-103. The claim is not indefinite because the term “measured values” has a clear and definite meaning, i.e., values that are measured.

Section 112 Rejections--“Said Output” in Claim 17

Claim 17 stands rejected under 35 USC §112, second paragraph, as being indefinite for lack of antecedent basis for “said output,” in line 2. Applicants agree with the Examiner and appropriate correction has been made to claims 15 - 17.

SECTION 102 REJECTIONS

Claims 1 - 7 and 9 - 15 stand rejected under 35 USC §102(a) or (b) as being anticipated by Voorakaranam et al., “Test Generation for Accurate Prediction of Analog Specifications” (paper (A)). Applicants respectfully traverse the rejections without further analysis or consideration because this document is part of the provisional application U.S. Serial No. 60/197,749. Applicants claimed the benefit of this provisional application under 35 USC §119(e), which provides that:

“An application for patent filed under section 111(a) [here, the present application] . . . disclosed . . . in a provisional application [here U.S. Serial No. 60/197,749]. . . by *an inventor or inventors* named in the provisional application,

shall have the same effect . . . as though filed on the date of the provisional application.” (emphasis added).

The filing date of the provisional application Serial No. 60/197,749 was April 19, 2000, and the filing date of the present application was April 18, 2001. Accordingly, the present application was timely filed to claim priority of the provisional application. In addition, the provisional application named two of the inventors named in the present application. Therefore, the present application was filed by “an inventor or inventors named in the provisional application” and therefore meets all of the requirements of 35 USC §119(e). It does not matter that there are additional inventors named in the present application, so long as there is at least one common inventor in the two applications.

Since the rejections are based on paper (A) and paper (A) is not prior art, the rejections are not proper.

SECTION 103 REJECTIONS

Claims 8, 16 and 17 stand rejected under 35 USC §103(a) as being unpatentable over Voorakaranam et al., “Test Generation for Accurate Prediction of Analog Specifications” (paper (A)) in view of Voorakaranam et al., “Low-Cost Signature Testing of RF Circuits” (paper (B)). Applicants respectfully traverse the rejections without the necessity of any further analysis or consideration.

As explained above, paper (A) is not prior art because it is part of a patent application on which priority is properly claimed.

It should be noted that paper (B) is also not prior art. The application states that it was “submitted” to the International Test Conference 2001. Although it is not stated in the application, the paper was not made public until after the application was filed. But even if it had been made public any time in 2001 it still could not be 102(b) prior art. And it cannot be 102(a) prior art because both the authors of the paper are named as inventors in the present application.

Since the rejections are based on papers (A) and (B) and neither paper (A) nor paper (B) is prior art, the rejections are not proper.

Accordingly, for all of the reasons stated above, Applicants respectfully submit that the application is in condition for allowance and the Examiner is respectfully requested to allow claims 1 - 17 and pass this case to issue.

Respectfully submitted,



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